Madrigal Pharmaceuticals

Corporate Presentation

May 2022

Resmetirom is an investigational therapy and has not been approved by the FDA (or any other regulatory authority).
Resmetirom is only available for use in a clinical trial setting (ClinicalTrials.gov NCT03900429, NCT04197479).

NASDAQ: MDGL

Forward Looking Statements

This communication contains "forward-looking statements" made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, that are based on our beliefs and assumptions and on information currently available to us but are subject to factors beyond our control. Forward-looking statements include but are not limited to statements or references concerning: our clinical trials, including the anticipated timing of disclosure, presentations of data from, or outcomes from our trials; research and development activities; market size and patient treatment estimates for NASH and NAFLD patients; the timing and results associated with the future development of our lead product candidate, MGL-3196 (resmetirom); our primary and secondary study endpoints for resmetirom and the potential for achieving such endpoints and projections; plans, objectives and timing for making a Subpart H (Accelerated Approval of New Drugs for Serious or Life-Threatening Illnesses) submission to FDA; optimal dosing levels for resmetirom; projections regarding potential future NASH resolution, safety, fibrosis treatment, cardiovascular effects, lipid treatment and/or biomarker effects with resmetirom; the potential efficacy and safety of resmetirom for non-cirrhotic NASH patients and cirrhotic NASH patients; ex-U.S. launch/partnering plans; the predictive power of liver fat reduction, as measured by non-invasive tests, on NASH resolution with fibrosis reduction or improvement; the predictive power of liver fat, liver volume changes or MAST scores for NASH and/or NAFLD patients; the effects of resmetirom' s mechanism of action; the achievement of enrollment objectives concerning patient number, safety database and/or timing for our studies; the predictive power of NASH resolution and/or liver fibrosis reduction or improvement with resmetirom using non-invasive tests, including the use of ELF, FibroScan, MRE and/or MRI-PDFF; the ability to develop clinical evidence demonstrating the utility of non-invasive tools and techniques to screen and diagnose NASH and/or NAFLD patients; the predictive power of non-invasive tests generally, including for purposes of diagnosing NASH, monitoring patient response to resmetirom, or recruiting a NASH clinical trial; potential NASH or NAFLD patient risk profile benefits with resmetirom; the potential for resmetirom to become the best-in-class and/or first-to-market treatment option for patients with NASH and liver fibrosis; and our possible or assumed future results of operations and expenses, business strategies and plans, capital needs and financing plans, trends, market sizing, competitive position, industry environment and potential growth opportunities, among other things. Forward-looking statements: reflect management's current knowledge, assumptions, judgment and expectations regarding future performance or events; include all statements that are not historical facts; and can be identified by terms such as "accelerate," "achieve," "allow," "anticipates," "be," "believes," "can," "continue," "could," "demonstrate," "design," "estimates," "expectation," "expects," "forecasts," "future," "goal," "hopeful," "inform," "intends," "may," "might," "on track," "planned", "planning," "plans," "positions," "potential," "powers," "predicts," "predictive," "projects," "seeks," "should," "will," "will achieve," "will be," "would" or similar expressions and the negatives of those terms. Although management presently believes that the expectations reflected in such forward-looking statements are reasonable, it can give no assurance that such expectations will prove to be correct and you should be aware that actual results could differ materially from those contained in the forward- looking statements.

Forward-looking statements are subject to a number of risks and uncertainties including, but not limited to: our clinical development of resmetirom; enrollment uncertainties, generally and in relation to COVID-19-related measures that may be continued for an uncertain period of time or implemented; outcomes or trends from competitive studies; future topline data timing or results; the risks of achieving potential benefits in studies that include substantially more patients, and patients with different disease states, than our prior studies; limitations associated with early stage or non-placebo controlled study data; the timing and outcomes of clinical studies of resmetirom; and the uncertainties inherent in clinical testing. Undue reliance should not be placed on forward-looking statements, which speak only as of the date they are made. Madrigal undertakes no obligation to update any forward-looking statements to reflect new information, events or circumstances after the date they are made, or to reflect the occurrence of unanticipated events. Please refer to Madrigal's submissions filed or furnished with the U.S. Securities and Exchange Commission for more detailed information regarding these risks and uncertainties and other factors that may cause actual results to differ materially from those expressed or implied. We specifically discuss these risks and uncertainties in greater detail in the section entitled "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2021, our Quarterly Report on form 10-Q for the Quarter ended March 31, 2022, and in our other filings with the SEC.

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Introduction to Madrigal

- **Nonalcoholic steatohepatitis (NASH)** is a prevalent liver disease with no FDA-approved therapy

- **Resmetirom**, Madrigal's lead product candidate, is designed to target key underlying causes of NASH in the liver
  - Positive Phase 3 safety data and secondary endpoints were announced in January 2022
  - Topline data from pivotal Phase 3 trial expected in Q4 2022

- **Our commercial strategy** focuses on launching resmetirom as a specialty medication for NASH patients with significant liver fibrosis
  - Madrigal to commercialize in the US and will partner in ex-US territories

- **The Madrigal leadership team** has deep experience developing and commercializing successful pharmaceutical products

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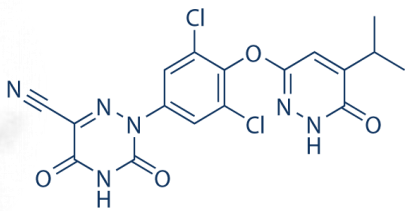
The Madrigal Story

Origins



2004-2008: Madrigal founder Dr. Rebecca Taub studies THR-B agonism while working at Hoffmann-La Roche

2008: Madrigal predecessor company VIA Pharmaceuticals hires Dr. Taub and enters into a development agreement with Hoffmann-La Roche for resmetirom

Founding and Development

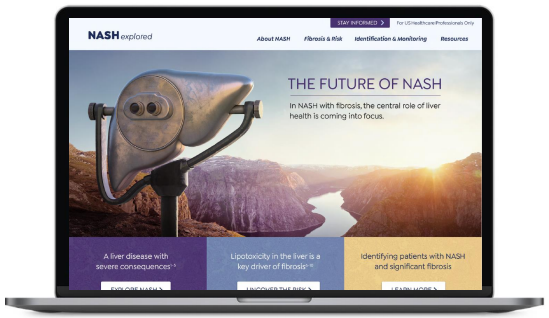
2011: Madrigal is incorporated in Delaware

2011: Ph 1 trial of resmetirom commences

2016: Ph 2 trial of resmetirom in NASH commences

2016: Madrigal merges with Synta Pharmaceuticals; is listed on NASDAQ

Growth



2016: Dr. Paul Friedman named CEO and Rebecca Taub named CMO of Madrigal

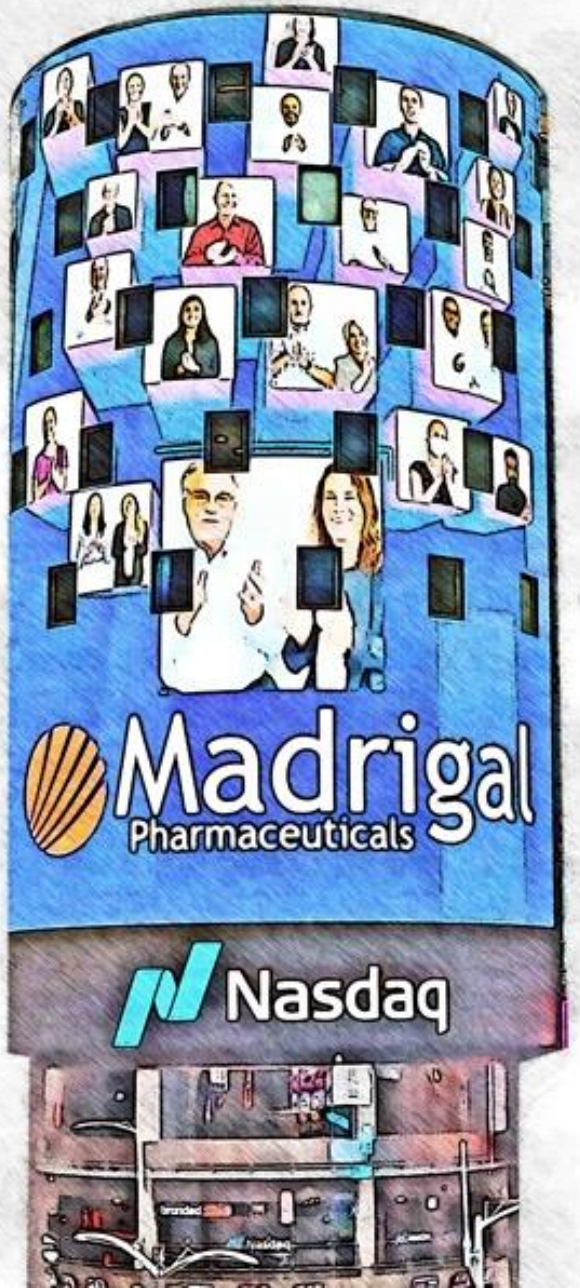
2017-2018: Positive Ph 2 results in NASH help accelerate Madrigal's growth

2019: Madrigal commences Ph 3 "MAESTRO" program for resmetirom

2020: Madrigal hires Remy Sukhija as Chief Commercial Officer and begins building its commercial organization

2021: Madrigal continues to expand executive team

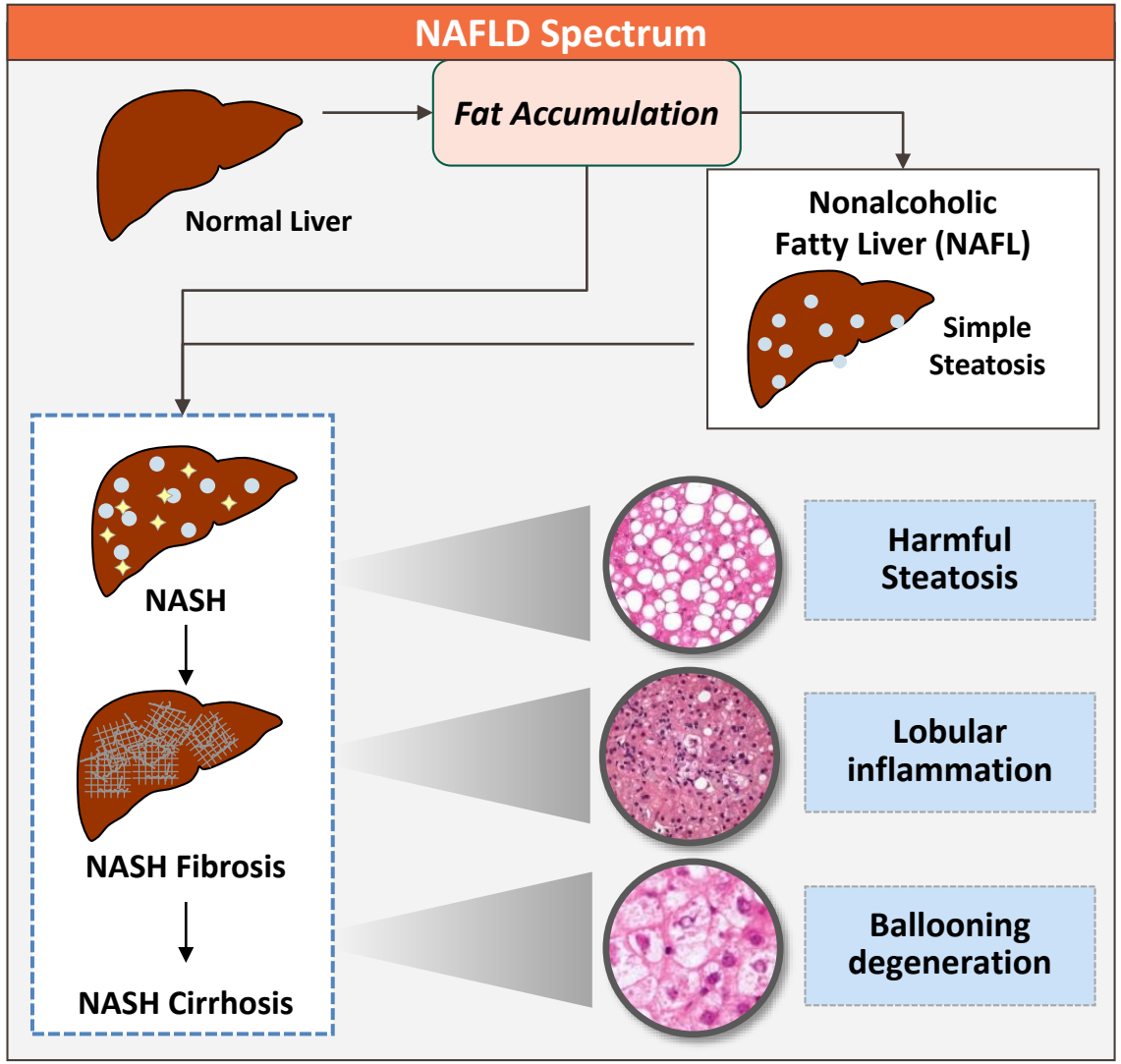
2021-2022: Positive Phase 3 MAESTRO-NAFLD-1 resmetirom data announced



Madrigal is a clinical-stage biopharmaceutical company pursuing novel therapeutics for NASH, a liver disease with high unmet medical need

Madrigal
Pharmaceuticals

NASH – A Liver Disease with Severe Consequences



DISEASE

- Nonalcoholic steatohepatitis (NASH) is an advanced form of nonalcoholic fatty liver disease (NAFLD) defined by the development of inflammation and hepatocyte injury

PREVALENCE

- An estimated ~22 million people in the U.S. are living with NASH[1-3]
  - Of those, 8 million people are likely to have significant fibrosis (F2-F3) and 2 million likely have cirrhosis (F4)[1]
  - Several hundred thousand patients may be identified and coded as NASH (ICD-10) by physicians in the U.S.

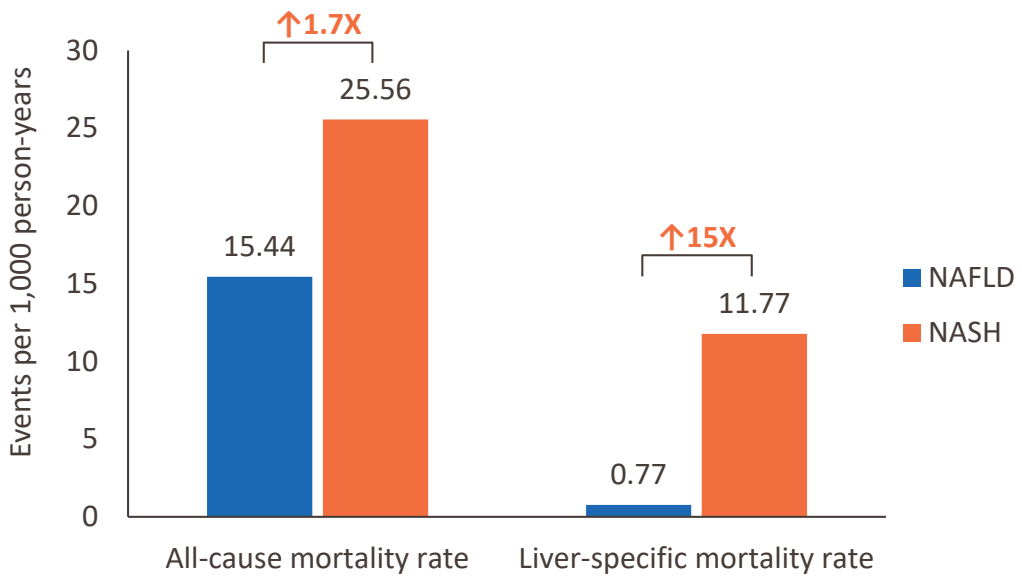
OUTCOME

- ~22% of NASH patients with stage 3 fibrosis progress to cirrhosis within 2 years[4]
- NASH is projected to soon become the leading cause for liver transplantation in the U.S.[5]

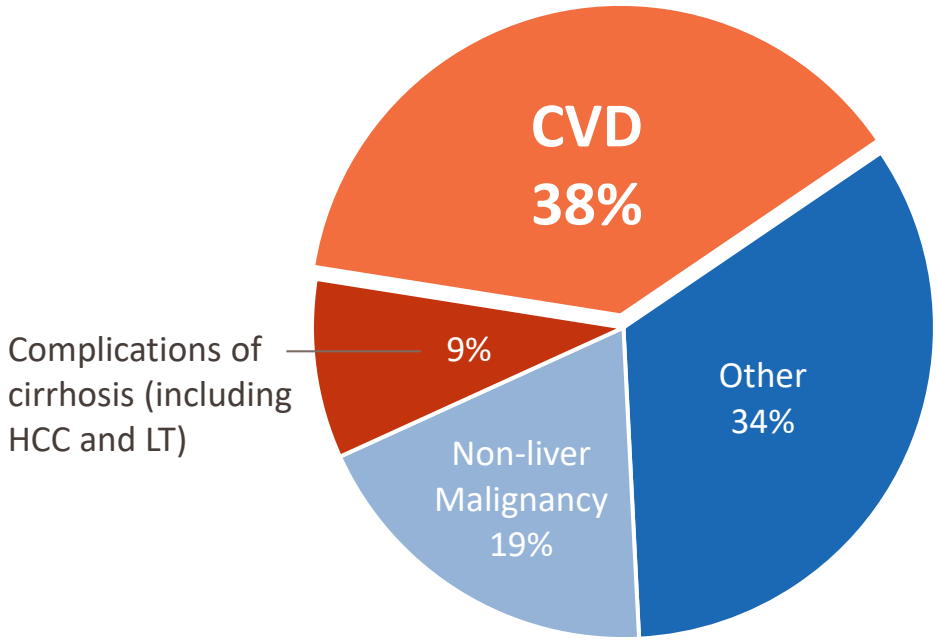
1. Estes C, Razavi H, Loomba R, Younossi Z, Sanyal AJ. Hepatology. 2018;67(1):123-133. 2. Hardy T, Oakley F, Anstee QM, Day CP. Annu Rev Pathol. 2016;11:451-496. 3. Rinella MA, Lominadze Z, Loomba R, et al. Ther Adv Gastroenterol. 2016;9(1):4-12. 4. Loomba R, Adams L. Hepatology. 2019;70(6):1885-1888. 5. Younossi ZM, et al. Clin Gastroenterol Hepatol. 2021;19(3):580-589.

NASH is Associated with Significant Morbidity and Mortality

The mortality rate among patients with NASH is substantially higher than patients with NAFLD[1]



CVD is a leading cause of death in patients with NASH/NAFLD[2]



CV, cardiovascular; CVD, cardiovascular disease; HCC, hepatocellular carcinoma; LT, liver transplantations

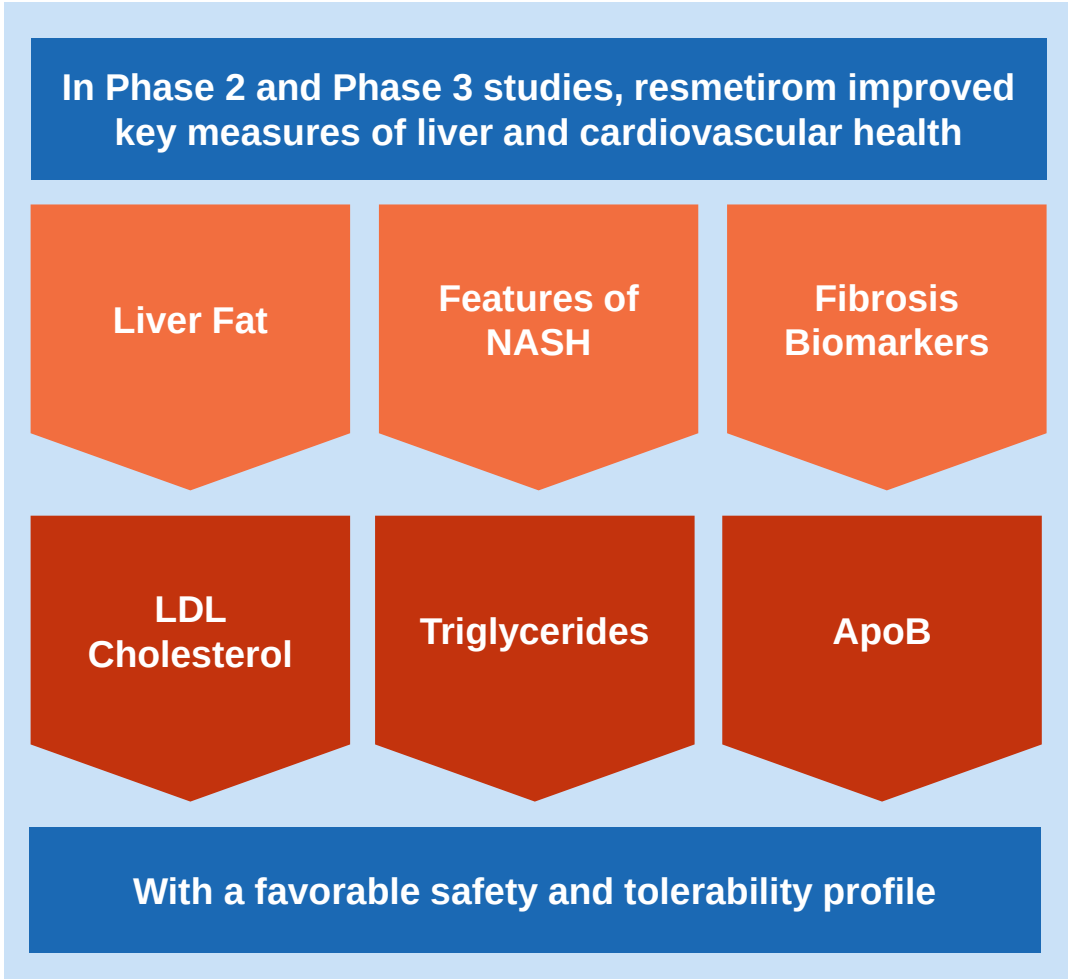
1. Younossi Y, et al. Hepatology. 2016;64(1):73-84. 2. Angulo, et al. Gastroenterology. 2015;149:389-97

Resmetirom for the Treatment of NASH with Significant Fibrosis

Madrigal's lead product candidate is **resmetirom**, a thyroid hormone receptor (THR) β-selective agonist

- Designed to target key underlying causes of NASH in the liver
- An oral, once-daily treatment
- Currently being evaluated in two Phase 3 trials[1], with data readouts in January and Q4 2022

Resmetirom has the potential to become the first medication approved for the treatment of patients with NASH

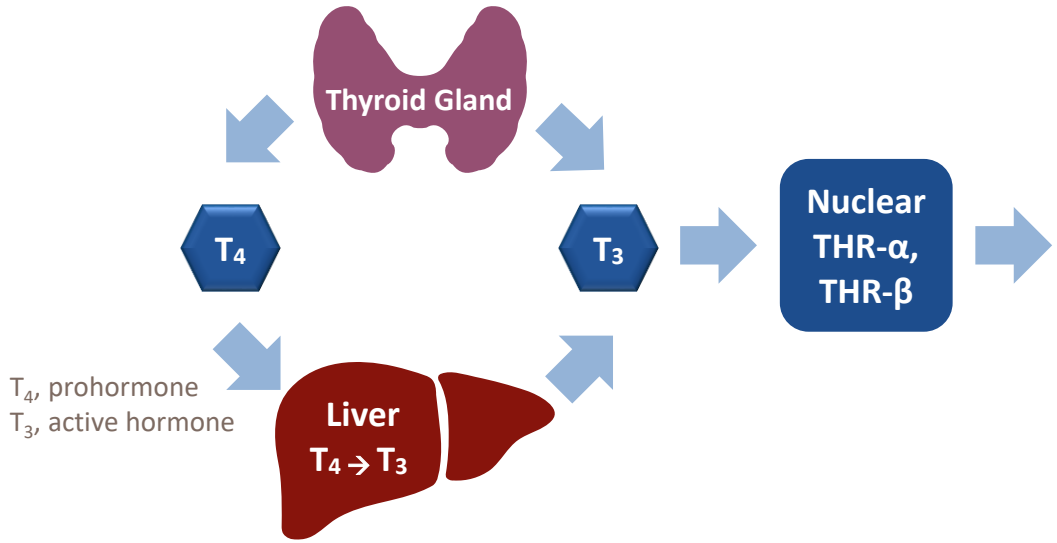


LDL, low-density lipoprotein; ApoB, Apolipoprotein B

1. ClinicalTrials.gov NCT03900429, NCT04197479

Resmetirom has a Pleiotropic Mechanism of Action that Addresses Multiple Components of NASH

Thyroid Hormone Pathway



In humans, thyroid hormone receptor-β (THR-β) agonism:

- ↓ lowers liver fat, potentially reducing lipotoxicity, NASH
- ↓ lowers LDL-cholesterol
- ↓ lowers triglycerides

Resmetirom is a THR-β selective, liver targeted molecule with little to no exposure outside the liver or activity at the systemic THR-α receptor

- Has not shown clinical impact on bone or cardiac parameters
- Has not shown clinical on impact thyroid axis hormones

1. Sinha RA and Yen PM. Cell Biosci. 2016 Jul 19;6:46. 2. Sinha RA, et al. Autophagy. 2015;11(8):1341-57.

Leading the Way in NASH

The Resmetirom Clinical Development Program

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Madrigal's Clinical Development Program for Resmetirom Addresses Critical Challenges in NASH Drug Development

Madrigal has designed the resmetirom program to reflect the latest thinking in the field and optimize potential for clinical and regulatory success

Target Selection

Drug target selection based on an understanding of NASH pathophysiology; an optimal treatment should **address the key underlying causes of NASH** in the liver

Powering

Late stage biopsy trials **powered appropriately** to demonstrate efficacy and overcome the high placebo response observed in NASH trials

Safety Database

A large safety database is needed to **support benefit-risk assessment** in a prevalent disease that requires chronic therapy

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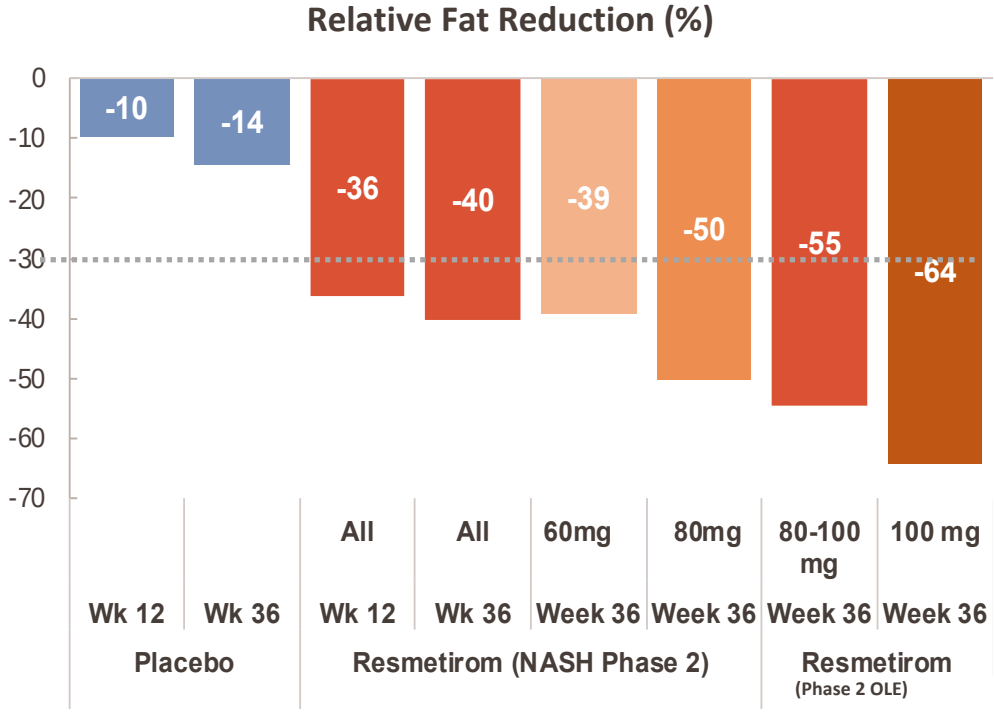
Successful Proof-of-Concept in Phase 2 Guided Madrigal's Strategy for the Phase 3 MAESTRO Program

- **Primary endpoint achieved:** Relative reduction in hepatic fat on MRI-PDFF at Week 12[1]
  - Dose dependent 50% reduction of hepatic fat at 80 mg dose
- **Key secondary and exploratory endpoints achieved:** Significant reductions in resolution of NASH, fibrosis biomarkers, liver enzymes, LDLc, ApoB, triglycerides and lipoprotein(a)[2]
- **Safety:** No change in Grade 2 or higher AEs and no safety signals related to mechanism of action
- **Fat reduction correlated with histologic improvement:** Resmetirom PDFF response correlated with NASH resolution and fibrosis reduction as measured by biopsy
- **Health-related quality of life:** Improved in patients who achieved reductions in PDFF and/or NAFLD Activity Score[3]



Resmetirom responders with ≥ 30% PDFF reduction had higher rates of NASH resolution (37%) on Week 36 liver biopsy compared to non-responders (4%)—hypothesis generating

MRI-PDFF, magnetic resonance imaging proton density fat fraction; OLE, open label active extension study; AE, adverse event

1. Harrison SA et al. Lancet. 2019 Nov 30;394(10213):2012-2024. 2. Harrison SA et al. Hepatol Commun. 2021 Jan 4;5(4):573-588.
3. Younossi ZM et al. Clin Gastroenterol Hepatol. 2021 Jul 27;S1542-3565(21)00821-1.

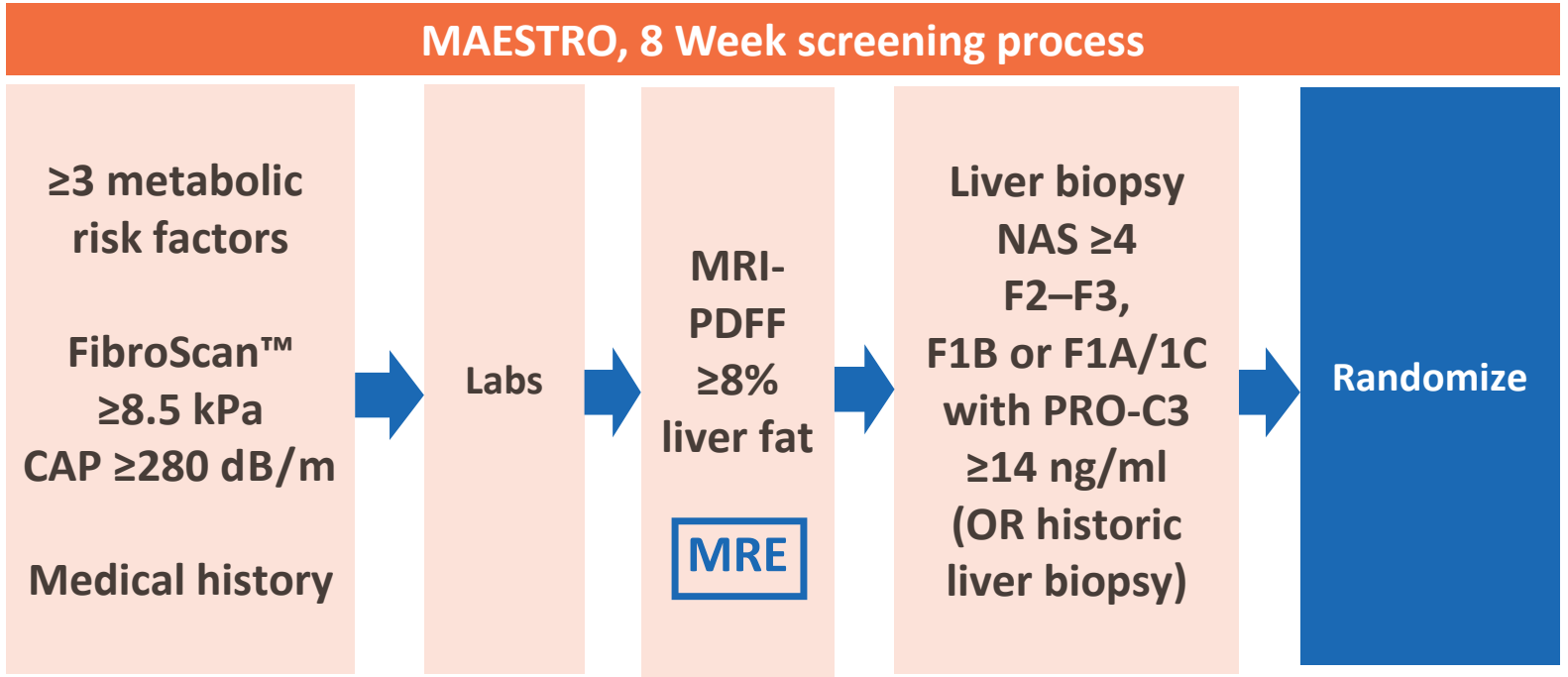
Overview of the MAESTRO Phase 3 Program

	MAESTRO-NAFLD-1 Safety Study	MAESTRO-NASH Biopsy Study	MAESTRO-NASH Outcomes Study
Primary Objective	To evaluate **safety and tolerability** as measured by incidence of adverse events at 52 weeks	To evaluate **improvement in histology*** at 52 weeks; study continues on to measure outcomes	To evaluate **progression to decompensation** events non-invasively
Patient Population	Over 1,200 patients with **presumed NASH**, identified non-invasively	~2,000 patients with NASH with **significant fibrosis** (Subpart H population = ~900)	~700 patients with NASH with **compensated cirrhosis**
Timeline	Positive results announced in **January 2022** Open-label extension ongoing	Biopsy results for Subpart H population expected **Q4 2022** Outcomes portion of trial is event-driven (est. 2026-27)	Trial is **event-driven** Expected to reach outcomes faster than MAESTRO-NASH Biopsy study (est. 2025)

*The dual primary surrogate endpoints on biopsy are NASH resolution, with at least a 2-point reduction in NAS (NASH Activity Score), and with no worsening of fibrosis OR a one point decrease in fibrosis with no worsening of NASH. Either primary endpoint can be achieved for a successful trial outcome.

The Phase 3 MAESTRO Screening Algorithm Successfully Identified Patients with NASH with Significant Fibrosis

Risk factors for NASH
Age >50
BMI >30
T2DM
Hypertension
Dyslipidemia
Metabolic syndrome
FibroScan VCTE ≥8.5 kPa CAP >280 dB/m



Metabolic risk factors and screening FibroScans were used to identify patients for both MAESTRO trials

- A lower VCTE threshold was used for MAESTRO-NAFLD-1 compared to MAESTRO-NASH with no liver biopsy
- An MRE was obtained in more than half of the patients, and was not used as an eligibility criterion

Using this screening paradigm, about 80% of screened MAESTRO-NASH patients have had NASH with significant fibrosis on liver biopsy

BMI, body mass index; T2DM, type 2 diabetes mellitus; VCTE, vibration-controlled transient elastography; CAP, controlled attenuation parameter; NAS, NAFLD Activity Score; PRO-C3, the pro-peptide of type lll collagen

Positive Phase 3 MAESTRO-NAFLD-1 Results Announced in January 2022

Primary and key secondary endpoints from the double-blind placebo-controlled Phase 3 MAESTRO-NAFLD-1 safety study were achieved:

- ✓ Resmetirom met the primary safety endpoint and was well-tolerated in patients treated for 52 weeks
- ✓ Resmetirom met key secondary endpoints by providing significant and clinically relevant reductions in liver fat and significantly reducing atherogenic lipids, including LDLc, ApoB and triglycerides

Stephen Harrison, M.D., Principal Investigator of the MAESTRO studies

*"**This positive readout from MAESTRO-NAFLD-1 is a significant milestone for the field.** As the first Phase 3 study in NASH that does not rely on liver biopsy to identify patients and measure treatment response, MAESTRO-NAFLD-1 will help accelerate the role of non-invasive imaging and biomarkers in NASH drug development. We see a safety and tolerability profile for resmetirom in this study of nearly one thousand patients treated for 52 weeks that, similar to earlier studies, leads to very low adverse event discontinuation rates."*

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Resmetirom Met the Safety Primary Endpoint and was Well-Tolerated in the MAESTRO-NAFLD-1 Trial

	Resmetirom 80 mg	Resmetirom 100 mg	Placebo
Safety population	(N=327)	(N=324)	(N=318)
At least one TEAE	289 (88.4)	279 (86.1)	260 (81.8)
At least one Serious TEAE	20 (6.1)	24 (7.4)	20 (6.3)
TEAE ≥ Grade 3 Severity	26 (8.0)	29 (9.0)	29 (9.1)
AE discontinuations from study	All treatments combined, n=21; (2.17%)		
Maximum NCI CTCAE Severity Grade			
Grade 1	99 (30.3)	99 (30.6)	92 (28.9)
Grade 2	164 (50.2)	151 (46.6)	139 (43.7)
AEs over 10%			
Diarrhea*	76 (23.2)	101 (31.2)	44 (13.8)
Nausea*	38 (11.6)	59 (18.2)	25 (7.9)

- AEs were generally mild to moderate in severity
- The frequency of serious AEs was similar across treatment arms and discontinuation for AEs was low
- Transient ALT increases ≥3 times the upper limit of normal were more common in the placebo group
- The most common AE reported was generally mild diarrhea or increased stool frequency at the beginning of therapy, which occurred in 9% and ~17% over the placebo rate in the 80 and 100 mg dose groups, respectively

AE, adverse event; TEAE, treatment emergent adverse event; NCI, National Cancer Institute; CTCAE, Common Terminology Criteria for Adverse Events; *No diarrhea was seen in the multiple ascending dose study at doses up to 200 mg; the incidence of diarrhea was 2% and nausea 0% at the 100 mg dose across completed Phase 1 studies

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Key Secondary Endpoints Were Achieved in the MAESTRO-NAFLD-1 Trial

	Resmetirom 100 mg OL	Resmetirom 80 mg	p-value	Resmetirom 100 mg	p-value	Placebo
LDLc %CFB (SE) (Week 24)	-21 (1.9)	-12.7 (2.1)	<.0001	-14.4 (2.1)	<.0001	-1.7 (2.0)
ApoB %CFB (SE) (Week 24)	-22 (1.5)	-14.6 (1.5)	<.0001	-16.6 (1.6)	<.0001	-0.1 (1.5)
MRI-PDFF %CFB (Week 16)	-49%	-41%	<.0001	-48%	<.0001	-6%
Liver volume PDFF correction %CFB	-60%					
MRI-PDFF %CFB (Week 52)	-53%	-43%	<.0001	-48%	<.0001	-8%
Liver volume PDFF correction %CFB	-61%					
Triglycerides baseline >150 mg/dL, CFB (SE)	-65 (8.3)	-55.6 (8.6)	NA	-59 (6.5)	NA	-6.9 (16.1)
Triglycerides baseline >150 mg/dL (geomean) %CFB (95% CI)	-25 (3.1)	-19.5 (-27.0 to -11.1)	=.0005	-21.5 (-28.0 to -14.3)	<.0001	-2.1 (-10.6 to 7.4)

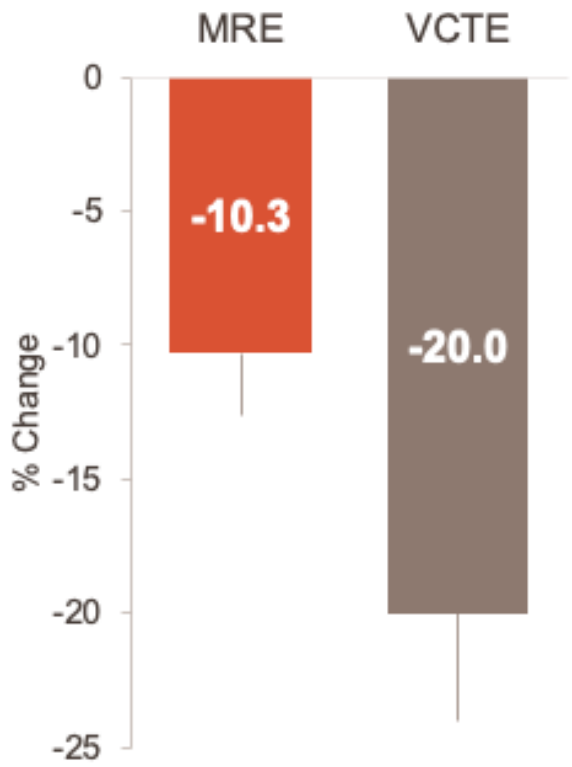
- Hierarchically-controlled key secondary endpoints were achieved for both dose groups
  - Lipid reductions were numerically greater in the 100 mg open label treatment arm compared to the 100 mg double-blind arm. Patients in the open-label active 100 mg treatment arm were less impacted by COVID-related dose interruptions than double-blind patients
- MRI-PDFF reductions were robust even though some double-blind patients had COVID-related treatment interruptions prior to the Week 16 or 52 MRI-PDFFs
- Patients in both dose groups achieved reductions from baseline in ALT (p=0.002; <0.0001) relative to placebo

CFB, change from baseline; SE, standard error; CI (confidence interval); OL, open label non-cirrhotic arm randomized concurrently with double-blind arms

In the Open-Label Arm of MAESTRO-NAFLD-1, Resmetirom Improved Fibrosis Imaging and Biomarkers

- Resmetirom improved magnetic resonance elastography (MRE) and FibroScan vibration-controlled transient elastography (VCTE) at week 52
  - MRE and FibroScan are measures of liver stiffness, a surrogate for liver fibrosis
- Worsening of FibroScan kPa (20% increase) and MRE kPa (15% increase) are associated with disease progression[1,2]
- Approximately 50% of patients had a 15% reduction in MRE (kPa) and/or 20% reduction in FibroScan kPa
- Serum fibrosis/inflammation biomarkers also showed reductions over the time-course of the study

Week 52 MRE and FibroScan (kPa)



Post baseline MREs conducted and assessed in patients with a baseline MRE kPa >=2.9

1. Ajmera VH, et al. Hepatology. 2020 Mar;71(3):849-860. 2. Loomba R, et al. Hepatology. 2021 Feb;73(2):625-643.

MAESTRO-NAFLD-1 Double-Blind FibroScan and MRE Data

- FibroScan CAP (controlled attenuation parameter) scores reflective of hepatic fat were statistically significantly ($p<0.0001$) reduced in resmetirom arms as compared with placebo
- FibroScan liver stiffness reductions were similar in the 100 mg open-label and double-blind arms
  - Responder analyses of FibroScan vibration-controlled transient elastography (VCTE) >=2 kPa reduction from baseline comparing resmetirom 100 mg open-label and double-blind arms with placebo showed a statistically significant increase in responders in resmetirom treatment arms (~44% averaged across the resmetirom arms) compared with placebo (25%)
    - Reductions in FibroScan VCTE appeared to be dose related
  - Mean reduction in FibroScan VCTE in resmetirom double-blind patients were greater than placebo but not statistically significant
- Magnetic resonance elastography (MRE) responders as measured by kPa reduction were significantly greater in resmetirom-treated groups compared with placebo, and showed a similar effect in all resmetirom dose arms

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MAESTRO-NAFLD-1 Trial Conclusions

- Resmetirom met the primary safety endpoint and was well-tolerated at the top dose of 100 mg as well as 80 mg in MAESTRO-NAFLD-1
- Key secondary endpoints were achieved in MAESTRO-NAFLD-1 at both dose groups
- Safety and efficacy are in line with expectations from Phase 2 liver biopsy study and randomized parallel open label 100 mg arm of MAESTRO-NAFLD-1
- Positive results from this trial support our conviction that resmetirom has the potential to be the first medication approved for treatment of patients with NASH with liver fibrosis

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The Resmetirom Development Program is Driving Advances in Non-invasive Diagnosis and Monitoring of NASH

- Biopsy is a requirement for registrational studies in NASH, but rarely performed in "real world" clinical practice
- The resmetirom clinical development program is designed to accelerate validation of non-invasive tests (NITs) in NASH drug development and provide clinicians with valuable data to inform patient care
  - **Phase 2** data demonstrated MRI-PDFF response predicts NASH resolution and fibrosis improvement on biopsy
  - **MAESTRO-NAFLD-1** is the first fully non-invasive Phase 3 study in NASH
  - **MAESTRO-NASH** includes multiple NITs that will further validate alternatives to biopsy
- Madrigal is committed to helping patients and healthcare providers move *Beyond the Biopsy*

Patient Advocates and Other NASH Stakeholders are Calling for Non-invasive Alternatives to Biopsy

GLI GLOBAL LIVER INSTITUTE

Beyond the Biopsy

"Non-invasive alternatives are necessary to respond to the growing incidence of NAFLD, NASH, and other liver diseases… Newer non-invasive screening and diagnostic tools are now being used, offering a safer and more thorough examination of the liver."

Source: Global Liver Institute

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MAESTRO-NASH Outcomes

- MAESTRO-NASH Outcomes is a randomized double-blind placebo-controlled study in approximately 700 patients with early NASH cirrhosis to allow for non-invasive monitoring of progression to liver decompensation events
  - FDA has publicly stated that an outcome study in NASH cirrhosis patients can support full approval in non-cirrhotic NASH; Madrigal met with FDA to confirm the strategy and study design
  - MAESTRO-NASH Outcomes is designed to assess the rate of disease progression in early NASH cirrhosis patients and enhance the statistical power of MAESTRO to assess clinical benefit
  - Decompensation events include development of ascites, bleeding varices, hepatic encephalopathy, and increase in MELD >=15 and are expected to occur at al rate that is higher than in MAESTRO-NASH
  - Liver biopsy is not an endpoint, the invasiveness and variability of liver biopsy is avoided
  - Several biomarker and imaging techniques will also be employed to assess correlates with disease progression
- Ongoing resmetirom open-label studies of more than 180 patients with well-compensated NASH cirrhosis (MAESTRO-NAFLD-1 open-label arm) support the potential of resmetirom in this patient population

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Based on Available Data, We Believe Resmetirom Has the Potential to be the First Medication Approved for NASH

Phase 3 MAESTRO-NAFLD-1

- Resmetirom met the primary safety endpoint and was well-tolerated
- Resmetirom provided significant improvements in key measures of liver and cardiovascular health

Phase 2

- Resmetirom achieved reductions in liver fat that we believe are predictive of NASH resolution and fibrosis improvement on biopsy in the Phase 3 MAESTRO-NASH trial
- Resmetirom demonstrated fibrosis improvement in an exploratory analysis of biopsies by second harmonic generation*

Robust clinical development program

- A total of 12 Phase 1 studies have been conducted
- Large safety database established to support benefit-risk assessment
- We believe the Phase 3 MAESTRO-NASH biopsy study is well powered to achieve both NASH resolution and fibrosis improvement endpoints

*An automated, fully quantitative assessment of fibrosis on liver biopsy slides based on unique architectural features of collagen

1. Harrison SA et al. Lancet. 2019 Nov 30;394(10213):2012-2024. 2. Harrison SA et al. Hepatol Commun. 2021 Jan 4;5(4):573-588.

PREPARING TO LAUNCH

Delivering an Approved Treatment for Patients with NASH with Significant Liver Fibrosis

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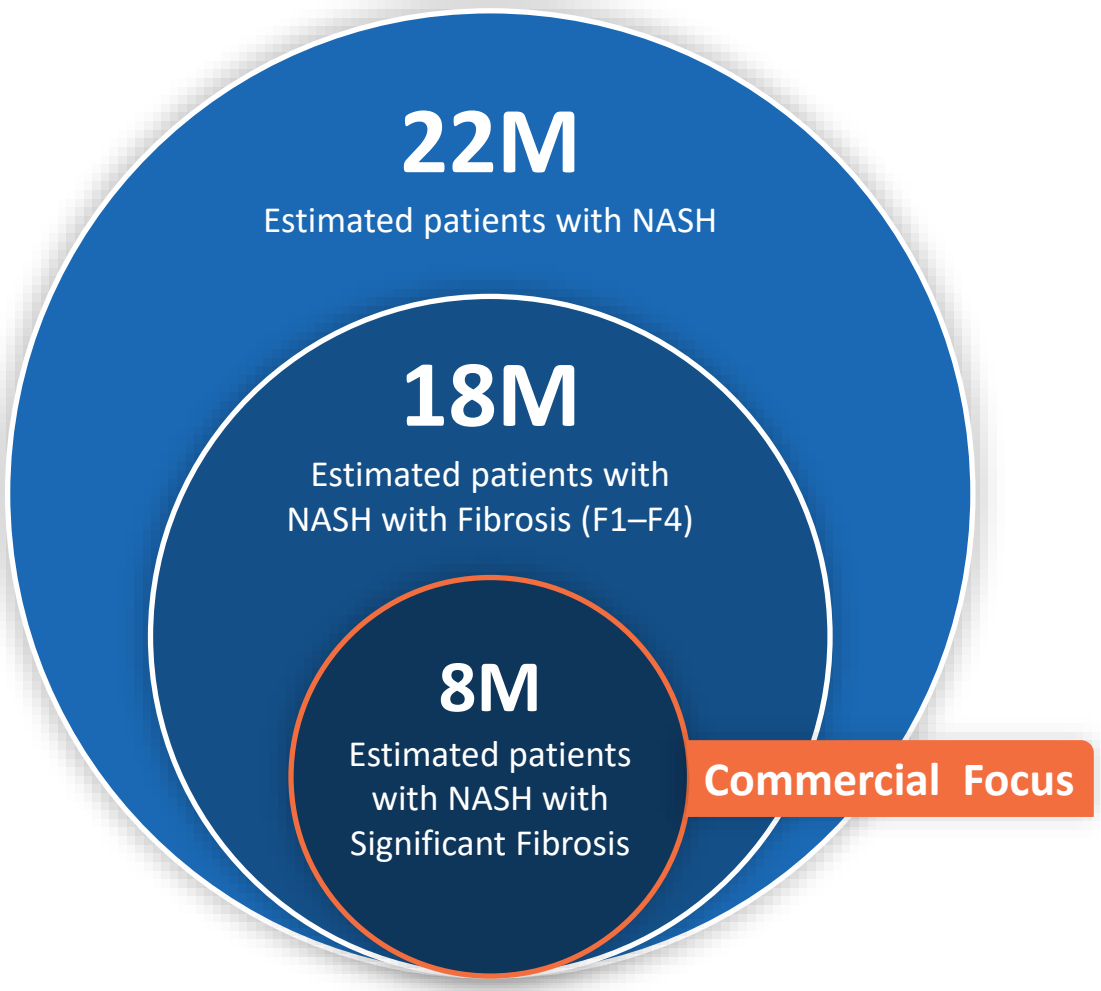
Resmetirom Initial Indication Expected to be for Treatment of NASH with Significant Fibrosis

Estimated over 8 million patients in the U.S., growing to ~11M by 2030



- Despite no currently approved therapies, patients with NASH are being diagnosed using non-invasive technologies and treated off-label, TODAY
- These existing identified patients with a NASH diagnosis could be immediate candidates for FDA-approved treatments and provide a strong foundation for rapid market uptake for resmetirom
  - Several hundred thousand may be identified and coded by community physicians using NASH ICD-10 code
- Over time, we believe diagnosis and treatment rates will increase to levels seen in more established markets
  - Type 2 diabetes/Dyslipidemia (60–80%)

Prevalence figures estimated from: Estes C, et al. Hepatology. 2018 Jan;67(1):123-133.

In Clinical Practice, Screening and Risk Assessment of NAFLD/NASH is Performed Using Non-invasive Tests

Sample Clinical Care Pathway

Identify Patients At Risk

Based on 2 or more metabolic risk factors, presence of Type 2 diabetes, steatosis on any imaging modality or elevated aminotransferases

History and Laboratory Tests

Excessive alcohol intake, complete blood count, liver function tests

Diagnosis and Risk Assessment

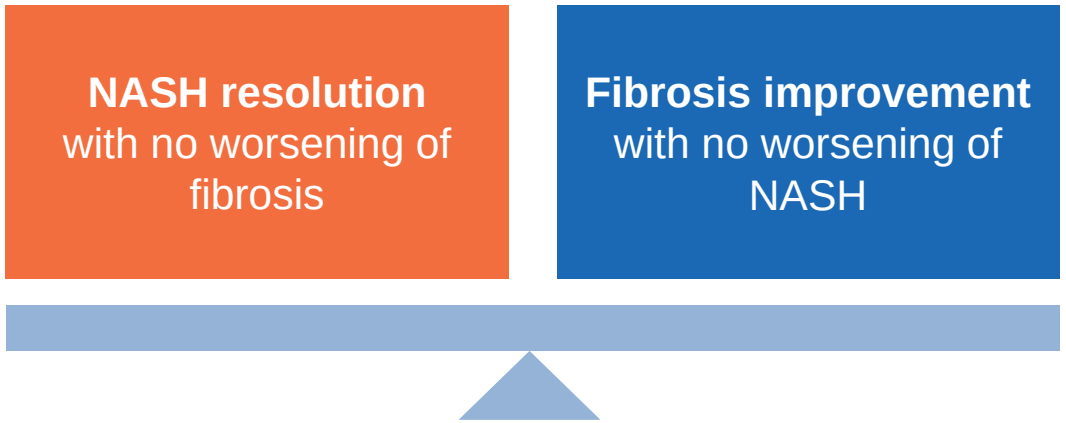
One or more non-invasive tests are performed to identify NASH and assess risk

- **Fibrosis Scores and Tests**: FIB-4, ELF
- **Liver Imaging:** MRI-PDFF, FibroScan (CAP), FibroScan (VCTE), MRE
- **Biopsy** is rarely performed in clinical practice

FIB-4, Fibrosis 4 Index; ELF, Enhanced Liver Fibrosis test; MRE, magnetic resonance elastography

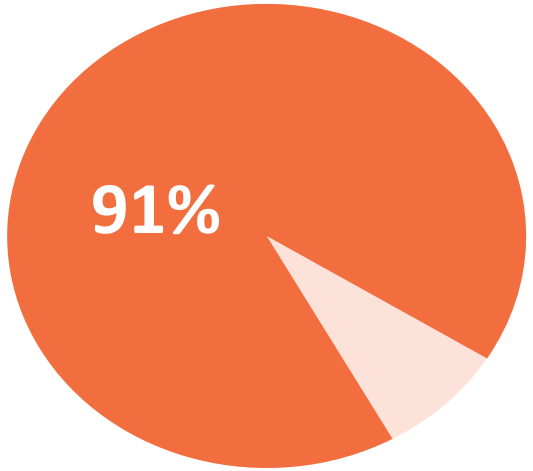
Resmetirom Target Profile* is Highly Attractive to NASH Specialists Based on Primary Market Research

NASH specialists see value in a NASH drug that meets either of the two FDA accepted surrogate endpoints**



- Signals they **understand pathophysiology** of NASH
- See equal value **in both** key liver endpoints

91% of NASH specialists report Resmetirom Target Profile* has "Extremely High" Utility**



- 49% of NASH specialists** **expect to prescribe** resmetirom* immediately at launch
  - Exceeds more typical response of 15–20%

*Target Profile assumes resmetirom achieves NASH Resolution and Fibrosis Improvement endpoints; reduces LDL, and has favorable safety/tolerability profile with QD oral dosing in Phase 3

- Information shown represents market research; not clinical data.
- Source: Madrigal US primary market research, Heps/GIs/Endos (n=127), Q4 2020

**Term 'NASH specialist' describes subset of Heps, GIs and Endos who manage at least 20-30 NASH patients per month.

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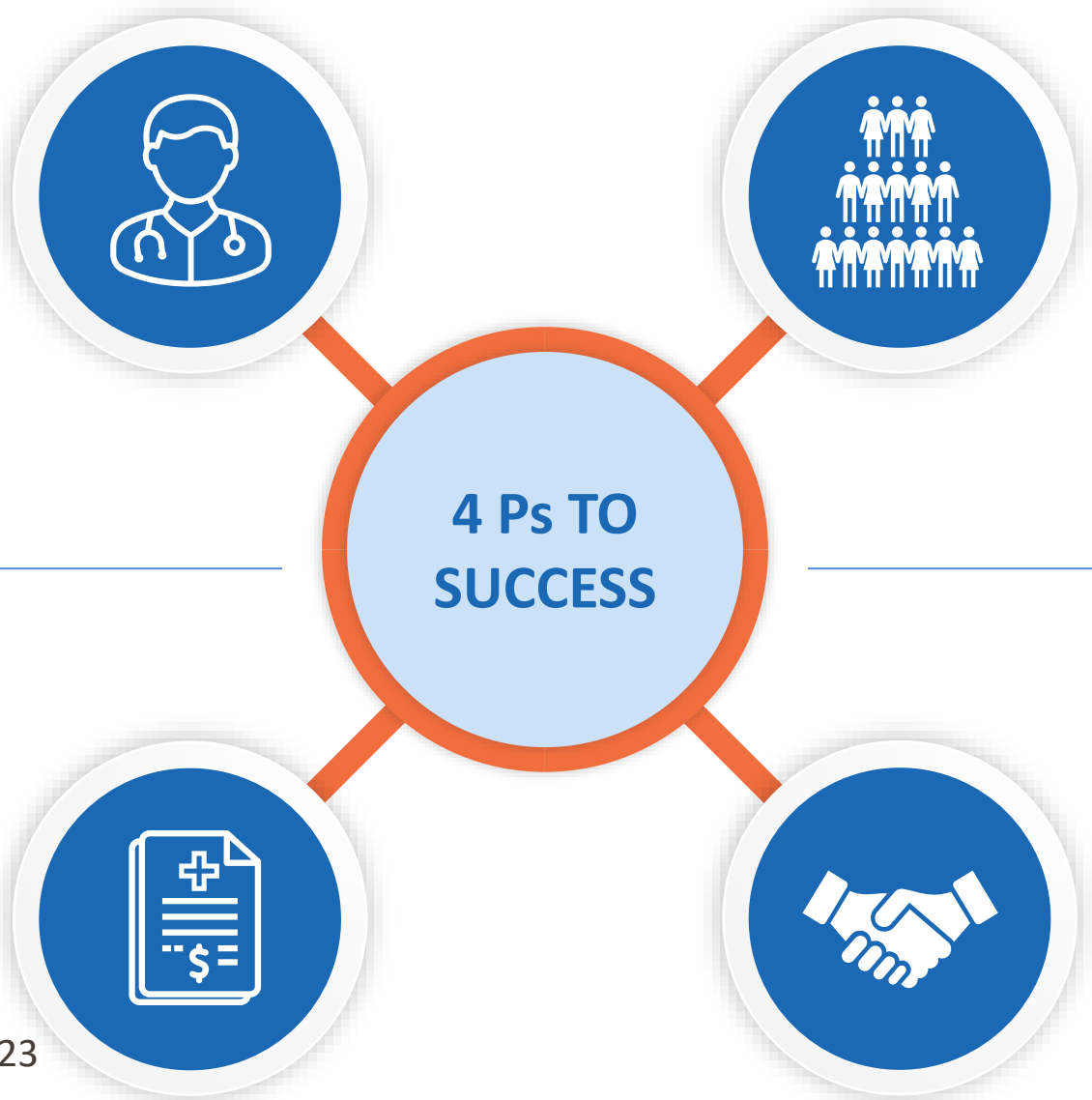
U.S. Launch Prep: NASH Market Development is Underway

Prescribers

- Field Medical is identifying and engaging NASH thought leaders in the U.S. and Europe
- “NASH Reimagined” disease education program launching Q2
- Expanded presence at key medical congresses focused on gastroenterology, hepatology, endocrinology

Payers

- NASH disease state education accelerating with payers
- Health economics and outcomes research underway
- Scientific exchange using MAESTRO-NASH data in 2023
- Cost Effectiveness and Budget Impact modelling discussions in 2023



Patients

- Expanded relationships with Patient Advocacy Groups in 2021
- Sponsoring International NASH Day and other education programs led by patient advocacy groups
- Disease education marketing campaign for NASH patients targeted to begin in 2023

Partners

- Establish commercialization partner(s) for ex-US territories
- Partnering discussions underway with large multinational pharmaceutical companies
- Plan to establish partnership following Phase 3 MAESTRO-NASH data release

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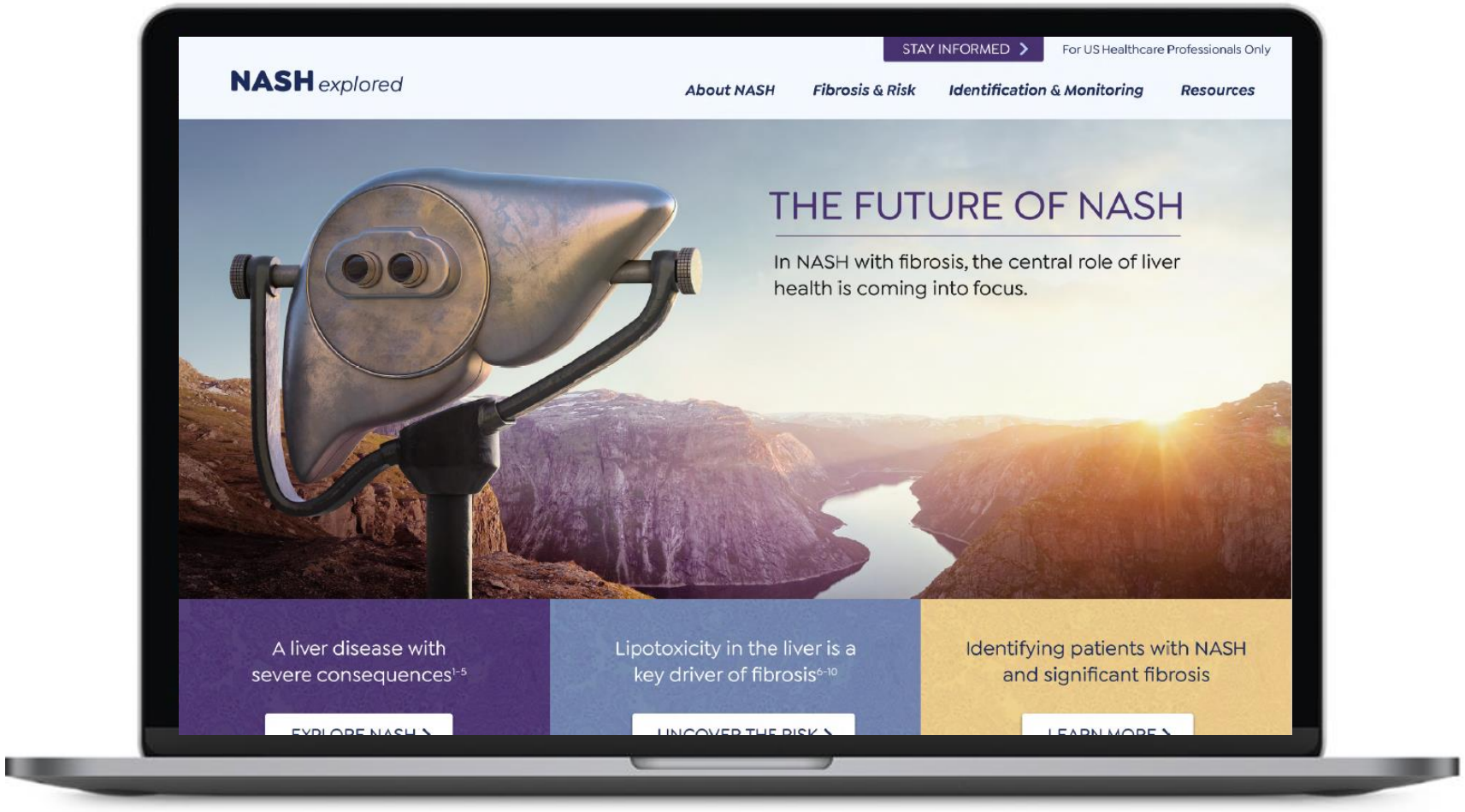
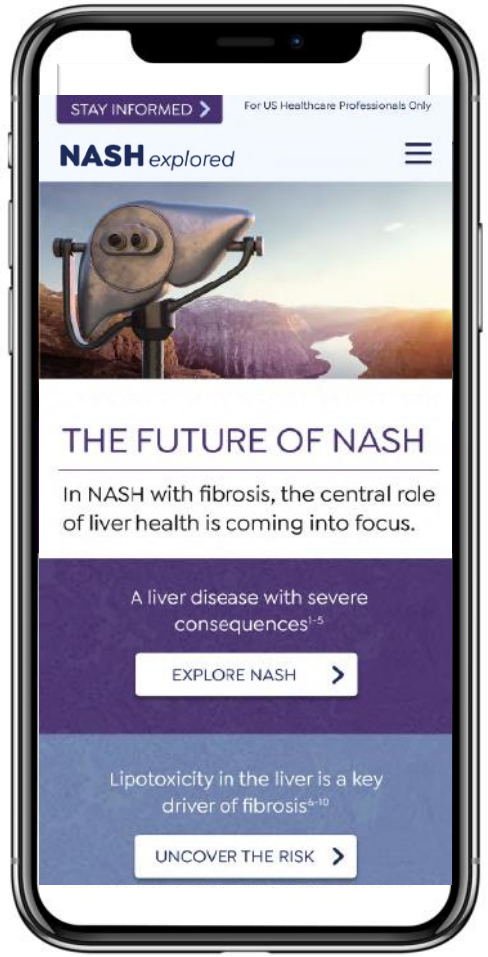
NASH Explored: HCP Disease Education Creative Campaign





Launch Preparation Is Underway

Building infrastructure and organization in the U.S. with focus on Medical Affairs, Market Access, Data/Analytics, Marketing

- Clear product positioning and comprehensive launch strategy driven by extensive market research
- Support physicians in identification of priority patients via non-invasive tests

- Extensive payer education
- Health Economics evidence generation to support access for labeled patient population

PLANNED LAUNCH
2023

INITIALLY TARGET
15–20K Hepatologists/ Gastroenterologists and Endocrinologists

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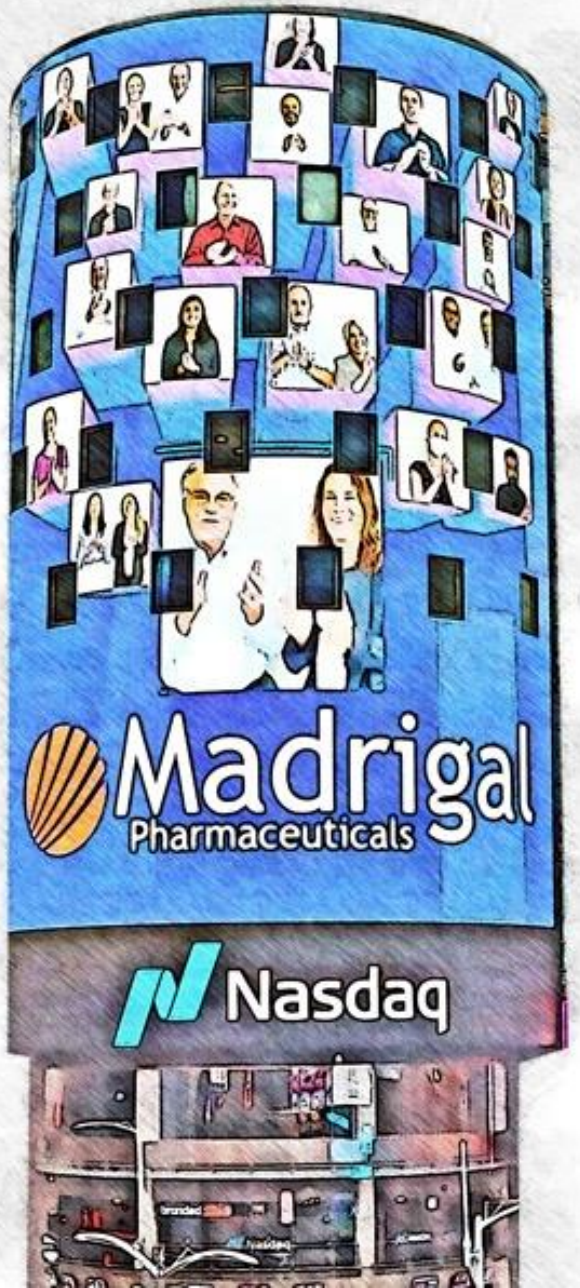


POSITIONED TO SUCCEED

Experienced Team Backed by Leading Healthcare Investors

Madrigal Pharmaceuticals

Experienced, Proven Leadership Team Focused on Successful Development and Commercialization of Resmetirom

Paul A. Friedman, MD
Chairman and Chief Executive Officer

Rebecca Taub, MD
Director, Founder, CMO and President of R&D

Alex Howarth
Chief Financial Officer

Brian J. Lynch
Chief Legal Officer

Remy Sukhija
Chief Commercial Officer

Robert Waltermire, PhD
Chief Pharmaceutical Development Officer

Dominic F. Labriola
Chief Data and Analytics Officer

Ed Chiang
SVP, Clinical and Technical Operations

Stephen Dodge, Pharm D, MBA
SVP, Global Medical Affairs

Thomas Hare, MS
SVP, Clinical Management

Sunil Kadam, PhD
SVP, Global Regulatory Affairs

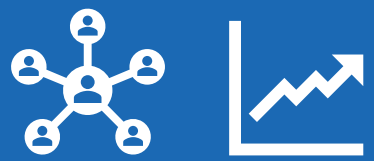
Kia Motesharei, PhD
SVP, Business & Corporate Development

Madrigal is Working to Deliver a Transformative Treatment for Patients with NASH with Significant Fibrosis

Clinical Development

- Phase 3 MAESTRO-NAFLD-1 safety study data
- Phase 3 MAESTRO-NASH biopsy study readout
- Filing for accelerated approval
- Phase 3 MAESTRO-NASH Outcomes study

Commercial Strategy



- Educating healthcare providers and patients
- Advancing our commercial strategy in the U.S.
- Establishing a commercial partner ex-U.S.

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Appendix

- Financial Summary

NASDAQ: MDGL

Q1 2022 Financial Summary

Cash, cash equivalents and marketable securities at March 31st, 2022		$220.0M
Operating expenses Q1 2022		$57.6M
R&D expenses Q1 2022		$47.9M
Cash burn[1] Q1 2022		$49.9M

	Total Facility	Available
ATM	$200M	$159.2M
Long Term Debt	$250M[2]	$200.0M

1. Cash burn represents net cash used in operating activities 2. Available in four defined tranches (with ability to draw two of the tranches subject to meeting certain milestone criteria)